Paul,

I reviewed the bonding costs in the submittal.

The problem with Bacon Davis is that the cost can be all over. See differences between Carbon and Emery County and natural gas verse non-natural gas. Means labor costs are also different. Note: the overhead for labor can be substantial as much as 50%.

The equipment costs are low compared to Blue Book and Means.

Hourly Operator's Total
Equipment Operating Equipment Hourly Hourly
Cost Costs Overhead Wage Rate Cost
(176 hr)

Standard Crawler Dozer

Caterpillar					
D6R 2003 (9-43) (3Q02)			0.1	62.15	62.15
D6R XL Series II (9-48) (2nd2009)	8200	41.45	0.1	62.15	159
D6N DS XL (9-51) (2nd 2007)		 	0.1	62.15	62.15
D6R XL Series III (9-51) (2nd 2007)			0.1	62.15	62.15
D7R Series II (9-51) (2nd2007)			0.1	62.15	62.15
D7N DS Series II (9-49) (2nd 2009)	11510	50.75	0.1	62.15	189.91
D7N DS XR Series II (9-49) (2nd 2009)	13145	54.35	0.1	62.15	204.09
D8R Series II (9-52)(2nd2007)			0.1	62.15	62.15
D8T (9-49)(2nd2009)	18450	71.8	0.1	62.15	256.44
D9R Semi-U EROPS (9-49) (2H2009)	19175	90.6	0.1	62.15	281.65
D9T (9-49) (2nd 2009)	23700	97.2	0.1	62.15	317.2
D10R Semi EROPS (9-49) (2nd2009)	25005	120.1	0.1	62.15	350.54
D11R U EROPS (9-49) (2nd 2009)	46760	191.35	0.1	62.15	564.89
	L		l		

Installing Contractor's Overhead & Profit

Below are the average installing contractor's percentage mark-ups applied to base labor rates to arrive at typical billing rates.

Column A: Labor rates are based on union wages averaged for 30 major U.S. cities. Base rates including fringe benefits are listed hourly and daily. These figures are the sum of the wage rate and employer-paid fringe benefits such as vacation pay, employer-paid health and welfare costs, pension costs, plus appropriate training and industry advancement funds costs.

Column B: Workers' Compensation rates are the national average of state rates established for each trade.

Column C: Column C lists average fixed overhead figures for all trades. Included are Federal and State Unemployment costs set at 6.2%; Social Security Taxes (FICA) set at 7.65%; Builder's Risk Insurance costs set at 0.44%; and Public Liability costs set at 2.02%. All the percentages except those for Social Security Taxes vary from state to state as well as from company to company.

Columns D and E: Percentages in Columns D and E are based on the presumption that the installing contractor has annual billing of \$4,000,000 and up. Overhead percentages may increase with smaller annual billing. The overhead percentages for any given contractor may vary greatly and depend on a number of factors, such as the contractor's annual volume, engineering and logistical support costs, and staff requirements. The figures for overhead and profit will also vary depending on the type of job, the job location, and the prevailing economic conditions. All factors should be examined very carefully for each job.

Column F: Column F lists the total of Columns B, C, D, and E.

Column G: Column G is Column A (hourly base labor rate) multiplied by the percentage in Column F (O&P percentage).

Column H: Column H is the total of Column A (hourly base labor rate) plus Column G (Total O&P).

Column I: Column I is Column H multiplied by eight hours.

Abbr.	Trade		A	В	С	D	Е	F	G	Н	1
		Base Incl. I	Base Rate Incl. Fringes		Average Fixed	Over-		Total Overhead & Profit		Rate with O & P	
		Hourly	Daily	Comp. Ins.	Over- head	head	Profit	%	Amount	Hourly	Daily
Skwk	Skilled Workers Average (35 trades) Helpers Average (5 trades) Foreman Average, Inside (\$.50 over trade) Foreman Average, Outside (\$2.00 over trade) Common Building Laborers	\$40.85 30.30 41.35 42.85 31.60	\$326.80 242.40 330.80 342.80 252.80	15.5% 17.2 15.5 15.5 17.8	16.3%	13.0% 11.0 13.0 13.0 11.0	10%	54.8% 54.5 54.8 54.8 55.1	\$22.40 16.50 22.65 23.50 17.40	\$63.25 46.80 64.00 66.35 49.00	\$506.00 374.40 512.00 530.80 392.00
Asbe Boil Bric Brhe Carp	Asbestos/Insulation Workers/Pipe Coverers Boilermakers Bricklayers Bricklayer Helpers Carpenters	44.10 50.20 40.50 32.15 39.95	352.80 401.60 324.00 257.20 319.60	14.4 11.4 14.4 14.4 17.8		16.0 16.0 11.0 11.0 11.0		56.7 53.7 51.7 51.7 55.1	25.00 26.95 20.95 16.60 22.00	69.10 77.15 61.45 48.75 61.95	552.80 617.20 491.60 390.00 495.60
Cefi Elec Elev Eqhv Egmd	Cement Finishers Electricians Elevator Constructors Equipment Operators, Crane or Shovel Equipment Operators, Medium Equipment	38.30 47.00 56.60 42.55 41.35	306.40 376.00 452.80 340.40 330.80	9.1 6.5 6.6 10.0		11.0 16.0 16.0 14.0 14.0		46.4 48.8 48.9 50.3 50.3	17.75 22.95 27.70 21.40 20.80	56.05 69.95 84.30 63.95 62.15	448.40 559.60 674.40 511.60 497.20
Eqlt Eqol Eqmm Glaz Lath	Equipment Operators, Light Equipment Equipment Operators, Oilers Equipment Operators, Master Mechanics Glaziers Lathers	39.05 36.80 42.70 38.60 35.55	312.40 294.40 341.60 308.80 284.40	10.0 10.0 10.0 13.9 10.6		14.0 14.0 14.0 11.0 11.0		50.3 50.3 50.3 51.2 47.9	19.65 18.50 21.50 19.75 17.05	58.70 55.30 64.20 58.35 52.60	469.60 442.40 513.60 466.80 420.80
Marb Mill Mstz Pord Psst	Marblé Setters Millwrights Mosaic & Terrazzo Workers Painters, Ordinary Painters, Structural Steel	38.65 41.60 37.70 35.20 36.00	309.20 332.80 301.60 281.60 288.00	14.4 9.5 9.1 12.5 44.2		11.0 11.0 11.0 11.0 11.0		51.7 46.8 46.4 49.8 81.5	20.00 19.45 17.50 17.55 29.35	58.65 61.05 55.20 52.75 65.35	469.20 488.40 441.60 422.00 522.80
Pape Pile Plas Plah Plum	Paper Hangers Pile Drivers Plasterers Plasterer Helpers Plumbers	35.45 38.50 36.15 32.30 48.75	283.60 308.00 289.20 258.40 390.00	12.5 20.1 13.6 13.6 7.8		11.0 16.0 11.0 11.0 16.0		49.8 62.4 50.9 50.9 50.1	17.65 24.00 18.40 16.45 24.40	53.10 62.50 54.55 48.75 73.15	424.80 500.00 436.40 390.00 585.20
Rodm Rofc Rots Rohe Shee	Rodmen (Reinforcing) Roofers, Composition Roofers, Tile & Slate Roofers, Helpers (Composition) Sheet Metal Workers	44.55 34.25 34.10 25.35 47.20	356.40 274.00 272.80 202.80 377.60	23.2 31.2 31.2 31.2 11.6		14.0 11.0 11.0 11.0 16.0		63.5 68.5 68.5 68.5 53.9	28.30 23.45 23.35 17.35 25.45	72.85 57.70 57.45 42.70 72.65	582.80 461.60 459.60 341.60 581.20
Spri Stpi Ston Sswk Tilf	Sprinkler Installers Steamfitters or Pipefitters Stone Masons Structural Steel Workers Tile Layers	48.15 49.35 40.80 44.70 38.10	385.20 394.80 326.40 357.60 304.80	7.8 7.8 14.4 37.9 9.1		16.0 16.0 11.0 14.0 11.0		50.1 50.1 51.7 78.2 46.4	24.10 24.70 21.10 34.95 17.70	72.25 74.05 61.90 79.65 55.80	578.00 592.40 495.20 637.20 446.40
Tilh Trlt Trhv Sswl Wrck	Tile Layers Helpers Truck Drivers, Light Truck Drivers, Heavy Welders, Structural Steel *Wrecking	30.05 30.95 31.95 44.70 31.60	240.40 247.60 255.60 357.60 252.80	9.1 16.6 16.6 37.9 34.1		11.0 11.0 11.0 14.0 11.0		46.4 53.9 53.9 78.2 71.4	13.95 16.70 17.20 34.95 22.55	44.00 47.65 49.15 79.65 54.15	352.00 381.20 393.20 637.20 433.20

*Not included in averages

Heavy Construction Cost Data